UNITED STATES PATENT AND TRADEMARK OFFICE

𝐴

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/754,160	01/04/2001	Andreas Schwager	50N3368/1177	3202

24272   7590   11/10/2005

Gregory J. Koerner
Redwood Patent Law
1291 East Hillsdale Boulevard
Suite 205
Foster City, CA 94404

EXAMINER
BULLOCK JR, LEWIS ALEXANDER

ART UNIT	PAPER NUMBER
2195	

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/754,160	SCHWAGER, ANDREAS
	Examiner	Art Unit	
	Lewis A. Bullock, Jr.	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>08 August 2005</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-28</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-28</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>04 January 2001</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Priority

1.   Acknowledgment is made of applicant's claim for foreign priority under 35

U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No.

09/754,160, filed on January 4, 2001.

Oath/Declaration

2.   The examiner acknowledges the receipt of the substitute Declaration.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by

LUDTKE (U.S. patent 6,501,441).

    The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome

either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the

invention "by another," or by an appropriate showing under 37 CFR 1.131.

As to claim 1, LUDTKE teaches a method to perform a scheduled action (display

data) of a plurality of devices (multiple display devices) that are connected via a network

(bus network) (col. 7, lines 41-67; col. 8, lines 7-10; column 14, lines 51-63; column 19,

lines 16-27), comprising: calculating an individual triggering time (presentation time /

delay time / via trigger packet) for each device that is to perform a predetermined action

(display) at a predetermined time, said network being implemented in a home

environment (via home devices communicating with display devices) (column 8, lines

36-39), each of the plurality of devices (display devices) having a different device type

(column 14, lines 51-63; column 19, lines 16-27) and a different device functionality (see

col. 19, lines 28-52); and utilizing the individual triggering time (presentation time / time

sent with trigger packet) for each device to perform the scheduled action (display data)

(column 14, lines 51-63; column 19, lines 16-27; col. 19, lines 28-52).

As to claim 2, LUDTKE teaches the individual triggering time is calculated based

on a synchronous start time of the scheduled action (start time) and an individual start-

up time (latency time) that a respective device requires to perform the predetermined

action (col. 11, line 10 – col. 12, line 4; col. 22, lines 10-34).

As to claim 3, LUDTKE teaches the individual start-up time that the respective

device needs to perform the predetermined action is based on the worst-case start-up

time that the respective device requires to perform the predetermined action (worst case

latency value) (col. 11, lines 3-9; col. 22, lines 10-34).

As to claim 4, LUDTKE teaches the individual start-up time that the respective

device requires to perform the predetermined action is based on a current state of the

respective device (via execution of calculateWallOfVideoDelay instruction) (col. 11, lines

10-44).

As to claim 5, LUDTKE teaches a resource manager (master device) of the

network respectively transmits the predetermined action (display data) and the

predetermined time (start time) of the scheduled action to each device that is to perform

the predetermined action at the predetermined time (col. 9, lines 13-23; col. 11, lines 3-

9; col. 22, lines 10-34).

As to claim 6, LUDTKE teaches every device calculates its individual triggering

time itself (via by determining its latency time) (col. 11, lines 10-31; col. 22, lines 10-34).

As to claim 7, LUDTKE teaches each display device waits until the delay value

has passed and then displays the frame (col. 12, lines 19-22; col. 22, lines 10-34).

Therefore, it is inherent by the teachings of LUDTKE that the device has an internal

clock that triggers the device at the triggering time.

As to claim 8, LUDTKE teaches each device transmits the triggering time

(latency time) to a clock device (master device) of the network (via the master device

controlling the 1394 bus network which has a clock) (col. 11, lines 3-9; col. 12, lines 22-

31; col. 8, lines 40-49; col. 1, line 44-58).

As to claim 9, LUDTKE teaches a resource manager (master device) of the

network respectively transmits the predetermined action (display data) and the

predetermined time (presentation time) of the scheduled action for each device that is to

perform the predetermined action at the predetermined time to a clock device (clock of

1394 bus network) of the network, or to another control device (master device) in the

network, and respectively, the predetermined action to the respective device and each

device that is to perform the predetermined action at the predetermined time transmits

its individual start-up time (latency time) needed to perform the predetermined action to

the clock device or to another control device (col. 10, line 65 – col. 12, line 4; col. 13,

line 60 – col. 14, line 11; col. 19, line 53 – col. 20, line 30; col. 22, lines 10-34).

As to claim 10, LUDTKE teaches the clock device or the another control device

calculates the individual triggering time for each device (via issuing a display instruction

with a start time and delay time based on the latency time) (col. 11, line 45 – col. 12,

line 22; col. 22, lines 10-34).

As to claim 11, LUDTKE teaches the another control device transmits its

calculated triggering times (start times / latency time) for each device to the clock device

(via the master determining the triggering times and sending the times to the 1394

network wherein the receiving devices have the current time and start time) (col. 11,

lines 10-31; col. 22, lines 10-34).

As to claim 12, LUDTKE teaches the another control device may also be the

resource manager (master device) (col. 10, line 65 – col. 12, line 4; col. 13, line 60 –

col. 14, line 11; col. 19, line 53 – col. 20, line 30; col. 22, lines 10-34).

As to claim 13, LUDTKE teaches the clock device triggers each device at the

individual triggering time for each device (via the initiation of the display operation based

on the current time stored in the bus network clock) (col. 10, line 65 – col. 12, line 4; col.

13, line 60 – col. 14, line 11; col. 19, line 53 – col. 20, line 30; col. 22, lines 10-53).

As to claim 14, LUDTKE teaches the network is a home network (via the video

sources and devices being a set-top box, video cassette recorder, digital video disk, a

television, and a computer) (col. 8, lines 35-49; col. 9, lines 31-40).

As to claim 15, LUDTKE teaches the network is a 1394 based network (col. 8,

lines 7-28).

As to claim 16, LUDTKE teaches each device is a consumer electronic device

(via the video sources and devices being a set-top box, video cassette recorder, digital

video disk, a television, and a computer) (col. 8, lines 35-49; col. 9, lines 31-40).

As to claim 17, LUDTKE teaches a system for performing a scheduled action

(display data) with network devices (display devices), comprising: means for managing

scheduled information for a network action (display data) on the electronic network (via

a master device) that is implemented with different types of consumer electronic devices

(column 14, lines 51-63; column 19, lines 16-27) in a home environment (via home

devices communicating with display devices) (column 8, lines 36-39); a first network

device (display device) coupled to the electronic network for accessing the scheduling

information (capabilities data structure / status data structure) and first device timing

information (calculated latency time to process the task / start time for display device) to

generate first device triggering information (presentation time / trigger packet); a second

network device (another display device) coupled to the electronic network for accessing

the scheduling information (capabilities data structure / status data structure) and

second device timing information (calculated latency time to process the task / start time

for display device) to generate second device triggering information (presentation time /

trigger packet), said first network device having a first device functionality that is

different from a second device functionality of the second network device (col. 19, lines 28-52); and a clock device (bus time) for utilizing the first device triggering information to activate the first network device, and for utilizing second device triggering information to active the second network device to thereby accurately perform the scheduled action of the electronic network (start the simultaneous display of data via the presentation time submitted based on the bus time network / sending trigger packets indicating the presentation time of the data) (col. 7, lines 41-67; col. 8, lines 7-10; col. 11, line 45 – col. 12, line 4; col. 13, lines 60-67; col. 21, line 41 – col. 22, line 9; col. 16, lines 41-53; column 14, lines 51-63; column 19, lines 16-27; col. 19, lines 28-52; col. 22 ,line 10-53).

As to claim 18, LUDTKE teaches the first device timing information (start time) is based on a first startup time of the first network device (latency time), and wherein the second device timing information (start time) is based on a second startup time (latency time) of the second network device (col. 11, line 45 – col. 12, line 4; col. 22, lines 10-53).

As to claim 19, LUDTKE teaches the means for managing scheduling information includes an invoking application (video source / video recorder / transmitting application) and a resource manager (master device) (col. 1, line 44 – col. 2, line 25; col. 8, lines 36-49; col. 19, line 53 – col. 20, line 30).

As to claim 20, LUDTKE teaches the electronic network functions in accordance with a home audio-video interoperability specification (col. 2, lines 63 – col. 3, line 9; col. 4, lines 52-59; col. 2, lines 51-62).

As to claim 21, LUDTKE teaches a system for managing a scheduled action (display data) in an electronic network (1394 bus network) comprising: an invoking application (transmitting application / application on control device) configured to generate action invocation information (DisplayIncomingStream Partition operation / commands) corresponding to the scheduled action (display data) (col. 1, line 44 – col. 2, line 25; col. 19, line 54 – col. 20, line 30); a resource manager (master device) configured to handle the action invocation information to thereby control one or more network devices (display devices) in said electronic network to perform the scheduled action (col. 19, line 54 – col. 20, line 30), said electronic network being implemented with different types of consumer electronic devices (column 14, lines 51-63; column 19, lines 16-27) in a home environment (via home devices communicating with display devices) (column 8, lines 36-39).

As to claim 22, LUDTKE teaches the resource manager (master device) passes the action invocation information to one or more device control modules (display device controls) that respectively correspond to, and control the one or more network devices (col. 19, line 54 – col. 20, line 30). It is inherent in the teachings of LUDTKE that since the commands sent to each device sets each device to an appropriate resolution before

the master device configures the display devices that the display devices must have

control software that is manipulated.

As to claim 23, LUDTKE teaches the one or more device control modules

(display device controls) each build an internal agenda for reservation of the one or

more network devices to perform the scheduled action (via by using the capabilities

data structure and status data structure to set the device to an appropriate resolution)

(col. 21, line 41 – col. 22, line 34; col. 19, line 54 – col. 20, line 30).

As to claim 24, LUDTKE teaches the device control module (display device

control) having the ability to check whether simultaneously actions can be performed

(via the number of simultaneous streams supported in the capabilities data structure)

(col. 21, lines 35-61). It is inherent within the teachings of LUDTKE that in order for the

allowance of multiple streams, there must exist multiple scheduled actions for displaying

data.

As to claim 25, LUDTKE teaches a trigger device (display device / clock) notifies

the resource manager (master device) to begin the scheduled action (via each display

device being ordered to configure its display before sending of the video stream through

a trigger event) (col. 22, lines 14-34; col. 20, lines 26-30; col. 5, lines 35-47).

As to claims 26 and 27, refer to claims 17 and 18 for rejection.

5.   Claims 1, 14, 16, 21-23, 25, 26 and 28 are rejected under 35 U.S.C. 102(e) as

being anticipated by HUMPLEMANN (U.S. Patent 6,466,971).

.As to claims 1, 14, 16 and 28, HUMPLEMANN teaches a method to perform a

scheduled action of a plurality of devices (home devices) that are connected via a

network (col. 5, lines 5-17), comprising: calculating an individual triggering time for

each device that is to perform a predetermined action at a predetermined time (the user

provides command and control data including time-delay record event data for the

DVCR and Tuner-Access Device) (col. 8, lines 24-33), the network being implemented

with different types of consumer electronic devices in a home environment (home

devices of a home network) (col. 5, lines 5-17), each of the plurality of devices having a

different device type and a different device functionality (via one could send television

signals while the other decoded compressed digital video signals for playback) (col. 8,

lines 15-34); and utilizing the individual triggering time for each device to perform the

scheduled action (automatically command and control a second set of server devices to

perform an automatic time-delay operation based on the user-selected time delay event

data for both devices) wherein the plurality of devices for which the individual triggering

time is calculated include electronic devices from different device categories, and

wherein at least one of the plurality of devices is not a display device (via the devices

are tuner-access device such as a Satellite and the other is a digital video Cassette

Recorder) (col. 8, lines 15-35).

        As to claim 26, refer to claim 1 for rejection.

As to claims 21-23 and 25, HUMPLEMANN teaches a system for managing a

scheduled action in an electronic network (home network) (col. 5, lines 5-17)

comprising: an invoking application (via a client device) configured to generate action

invocation information (command and control data) corresponding to the scheduled

action (col. 8, lines 24-33); a resource manager (source server device) configured to

handle the action invocation information to thereby control one or more network devices

(second set of server devices) in the electronic network to perform the scheduled action

(automatically command and control a second set of server devices to perform an

automatic time-delay operation based on the user-selected time delay event data for

both devices) (col. 8, lines 15-34), the electronic network being implemented with

different types of consumer electronic devices in a home environment (via the devices

are tuner-access device such as a Satellite and the other is a digital video Cassette

Recorder) (col. 8, lines 15-35) wherein the resource manager (source server device)

passes the action invocation to one or more device control modules (another server

device or second set of server device) that respectively correspond to and control the

one or more network devices (other server devices) to reserve the performance of the

scheduled action (via passing the time-delay record such that the action is performed at

the desired time) (col. 7, lines 25-45) and a trigger device (client device) notifies the

resource manager (source device) to being the scheduled action (col. 8, lines 2-10).

Response to Arguments

1.   Applicant's arguments filed August 8, 2005 have been fully considered but they are not persuasive. Applicant centrally argues that the electronic network that is implemented with different types of consumer electronic devices in a home environment are not taught or suggested either by the cited reference or by the Examiner's citations thereto. Applicant states that Ludtke teaches are limited to displaying image data on a plurality of the same types of devices whereas Applicant discloses and claims an electronic network that is implemented with different types of electronic devices. Applicant argued that the limitation of different device type is not the same as the different display type mention in Ludtke. The examiner disagrees. As proper under M.P.E.P. 2111, claims are given their broadest reasonable interpretation consistent with the specification wherein words of a claim must be given their "plain meaning" unless they are defined in the specification. Ludtke explicitly teaches that display devices are appropriately configured display devices of different types. Therefore, Ludtke teaches that the display devices are different types of consumer electronic devices in a home network. Applicant's intent may be something that is different from Ludtke, i.e. the claim limitations of dependent claim 28. However, as proper under M.P.E.P. 2111, words of a claim are given their plain meaning absent a explicit definition in the specification. Therefore, interpretation of different types of electronic devices would mean there is some defined difference of type in the electronic devices, e.g. the defined difference in types of display devices as detailed in Ludtke. In addition, Ludtke teaches that the configuration is exemplary only. That it should be apparent that an audio/video network

could include many different combinations of components and that data, commands and parameters can be sent in either direction between the devices (col. 8, lines 30-35). Therefore, Ludtke inherently teaches that the devices are different types.

Applicant argued that Ludtke does not teach or disclose that every device calculates its individual trigger time itself. The examiner disagrees. Ludtke teaches that the display devices are responsible for receiving, partitioning and scaling the video stream and that the display devices must be capable of implementing the present invention (col. 14, lines 19-50). In addition, Ludtke also teaches that the configuration is exemplary only. That it should be apparent that an audio/video network could include many different combinations of components and that data, commands and parameters can be sent in either direction between the devices (col. 8, lines 30-35). Therefore, Ludtke not only details situations wherein a master device establishes a worst case latency value for the display devices but that the display devices are required to establish this latency themselves, e.g. capable of implementing the present invention, because data, commands, and parameters can be sent in either direction. Therefore, Ludtke adequately teaches the invention as disclosed.
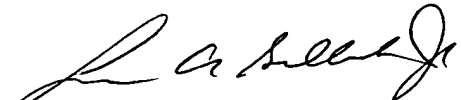

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (571) 272-3759. The examiner can normally be reached on Monday-Friday, 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng An can be reached on (571) 272-3756. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

November 8, 2005

LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER